

AMENDMENTS IN THE CLAIMS

Please amend the claims as indicated below. The language being added is underlined (“ ”) and the language being deleted contains strikethrough (“~~—~~”):

1. (currently amended) A system for establishing a secure execution environment for a software process executed by a program operating on a computer, comprising:

A) a software process operating on a computer, said software process including a plurality of attributes;

an operating system kernel in communication with said software process and in communication with an executable file to be accessed by said software process; and

a system call trap associated with said operating system kernel, said system call trap configured to modify the assign a selected plurality of said attributes for the ~~said~~ software process based on an executable environment attribute, ~~said selected plurality of attributes~~ stored in association with said executable file.

2. (currently amended) The system of claim 1, wherein said system call trap further comprises:

a process attribute extension; and

an access token extension associated with said process attribute extension, said access token extension including said executable environment attributes ~~selected plurality of~~ attributes.

3. (currently amended) The system of claim 1, wherein said executable environment attributes ~~selected plurality of attributes~~ are ~~is~~ contained in a database associated with said executable file.

AI 4. (currently amended) The system of claim 1, wherein said ~~selected plurality of attributes are~~ executable environment attribute is chosen from the group consisting of user ID, group IDs and privileges.

5. (original) The system of claim 1, wherein said execution environment isolates said software process from any other software process operating on said computer.

6. (original) The system of claim 1, wherein said software process is a web server process.

7. (original) The system of claim 1, wherein said software process is a file transfer process.

8. (original) The system of claim 1, wherein said software process is a mail server process.

9. (currently amended) The system of claim 1, wherein said executable environment attributes~~selected plurality of attributes are~~ is associated to said software process upon execution of said software process.

10. (currently amended) The system of claim 1, wherein said executable environment attributes~~selected plurality of attributes~~ replaces any existing attributes associated with said software process.

11. (currently amended) A method for establishing a secure execution environment for a software process executed by a program operating on a computer, the method comprising the steps of:

AI operating a software process on a computer, said software process including a plurality of attributes;

executing an operating system kernel in communication with said software process, said operating system kernel in communication with an executable file to be accessed by said software process; and

~~assigning a selected plurality of said attributes to said software process, said selected plurality of attributes stored in association with said executable file~~modifying the plurality of attributes for the software process based on an executable environment attribute stored in association with the executable file.

12. (currently amended) The method of claim 11, further comprising the steps of:

executing a process attribute extension; and

executing an access token extension associated with said process attribute extension, said access token extension including the executable environment attributes~~said selected plurality of attributes.~~

13. (currently amended) The method of claim 11, wherein the executable environment

~~attributes~~~~said selected plurality of attributes are~~ is contained in a database associated with said executable file.

14. (currently amended) The method of claim 11, wherein said the executable environment attributes~~selected plurality of attributes are~~ is chosen from the group consisting of user ID, group IDs and privileges.

15. (original) The method of claim 11, wherein said execution environment isolates said software process from any other software process operating on said computer.

16. (original) The method of claim 11, wherein said software process is a web server process.

17. (original) The method of claim 11, wherein said software process is a file transfer process.

18. (original) The method of claim 11, wherein said software process is a mail server process.

19. (currently amended) The method of claim 11, wherein the executable environment attributes~~said selected plurality of attributes are~~ is associated to said software process upon execution of said software process.

20. (currently amended) The method of claim 11, wherein the executable environment attributes~~said selected plurality of attributes~~ replaces any existing attributes associated with said software process.

21. (currently amended) A computer readable medium having a program for establishing a secure execution environment for a software process executed by a program operating on a computer, the program including logic for performing the steps of:

operating a software process on a computer, said software process including a plurality of attributes;

executing an operating system kernel in communication with said software process, said operating system kernel in communication with an executable file to be accessed by said software process; and

modifying the plurality of attributes for the software process based on an executable environment attribute stored in association with the executable file~~assigning a selected plurality of said attributes to said software process, said selected plurality of attributes stored in association with said executable file.~~

22. (currently amended) The program of claim 21, further comprising logic for performing the steps of:

executing a process attribute extension; and

executing an access token extension associated with said process attribute extension, said access token extension including the executable environment attributes~~said selected plurality of attributes.~~

23. (currently amended) The program of claim 21, wherein the executable environment attributes~~said selected plurality of attributes~~ are ~~is~~ contained in a database associated with said executable file.

A1 24. (currently amended) The program of claim 21, wherein said the executable environment attributes~~selected plurality of attributes are~~ is chosen from the group consisting of user ID, group IDs and privileges.

25. (original) The program of claim 21, wherein said execution environment isolates said software process from any other software process operating on said computer.

26. (original) The program of claim 21, wherein said software process is a web server process.

27. (original) The program of claim 21, wherein said software process is a file transfer process.

28. (original) The program of claim 21, wherein said software process is a mail server process.

29. (currently amended) The program of claim 21, wherein said the executable environment attributes~~selected plurality of attributes are~~ is associated to said software process upon execution of said software process.

30. (currently amended) The program of claim 21, wherein the executable environment attributes~~said selected plurality of attributes~~ replaces any existing attributes associated with said software process.

31. (new) The system of claim 1, wherein the system call trap is further configured to determine whether the execution environment attribute contains an inherit flag.

32. (new) The system of claim 31, wherein the system call trap is further configured to store a current attribute for a current process when the execution environment attribute contains an inherit flag.

33. (new) The system of claim 32, wherein the system call trap is further configured to:
determine whether the current attribute for the current process contains the inherit flag;


merge the execution environment attribute with a previously stored attribute if the current attribute does not contain the inherit flag; and

merge the execution environment attribute with the current attribute if the current attribute does contain the inherit flag.

34. (new) The method of claim 11, further comprising determining whether the execution environment attribute contains an inherit flag.

35. (new) The method of claim 34, further comprising storing a current attribute for a current process when the execution attribute contains an inherit flag.

36. (new) The method of claim 35, further comprising:
determining whether the current attribute for the current process contains the inherit flag; and

 merging the execution environment attribute with a previously stored attribute if the current attribute does not contain the inherit flag.

37. (new) The method of claim 35, further comprising:
determining whether the current attribute for the current process contains the inherit flag; and

merging the execution environment attribute with the current attribute if the current attribute does contain the inherit flag.

38. (new) The computer readable medium of claim 21, further comprising logic for determining whether the execution environment attribute contains an inherit flag.

39. (new) The computer readable medium of claim 38, further comprising logic for storing a current attribute for a current process when the execution attribute contains an inherit flag.

40. (new) The computer readable medium of claim 39, further comprising logic for:
determining whether the current attribute for the current process contains the inherit
flag;

merging the execution environment attribute with a previously stored attribute if the
current attribute does not contain the inherit flag; and

merging the execution environment attribute with the current attribute if the current
attribute does contain the inherit flag.
